PTO/SB/08A (08-03)

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1

(Use as many sheets as necessary)

Co.	Complete if Known						
Application Number	10/826,885						
Filing Date	04/16/2004						
First Named Inventor	WAYCUILIS, John J.						
Art Unit	1764						
Examiner Name	unknown						
Attorney Docket Number	200306 USA						

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
TH	1	<sup>US-</sup> 2,168,260	08-01-1939	Heisel et al.	
1	2	<sup>US-</sup> 2,246,082	06-17-1941	Vaughan et al.	
	3	<sup>US-</sup> 2,488,083	11-15-1949	Gorin et al.	
	4	<sup>US-</sup> 2,677,598	05-04-1954	Crummett et al.	
	5	<sup>US-</sup> 2,941,014	06-14-1960	Rothweiler et al.	
	6	<sup>US-</sup> 3,172,915	03-09-1965	Borkowski et al.	
	7	<sup>US-</sup> 3,246,043	04-12-1966	Rossett et al.	
	8	<sup>US-</sup> 3,562,321	02-09-1971	Borkowski et al.	
	9	<sup>US-</sup> 3,598,876	08-10-1971	Bloch	
	10	<sup>US-</sup> 3,702,886	11-14-1972	Argauer et al.	
	11	<sup>US-</sup> 3,876,715	04-08-1975	McNuity et al.	
	12	<sup>US-</sup> 3,894,107	07-08-1975	Butter et al.	
	13	<sup>US-</sup> 4,197,420	04-08-1980	Ferraris et al.	
	14	<sup>US-</sup> 4,347,391	08-31-1982	Campbell	
	15	us- 4,489,210	12-18-1984	Judat et al.	
	16	<sup>US-</sup> 4,523,040	06-11-1985	Olah	
	17	<sup>US-</sup> 4,652,688	03-24-1987	Brophy et al.	
	18	<sup>US-</sup> 4,665,270	05-12-1987	Brophy et al.	
4	19	<sup>US-</sup> 4,748,013	05-31-1988	Saito et al.	

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> (# known)	MM-DD-YYYY		Or Relevant Figures Appear	To
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Examiner Signature	Tam	Date Considered	9/16/05

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Sheet 2

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known						
Application Number	10/826,885					
Filing Date	04/16/2004					
First Named Inventor	WAYCUILIS, John J.					
Art Unit	1764					
Examiner Name	Unknown					
Allomey Docket Number	200306 USA					

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (f known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Peges, Columns, Unes, Where Relevant Passages or Relevant Figures Appear
TN	20	<sup>US-</sup> 4,769,504	09-06-1988	Noceti et al.	
1	21	<sup>US-</sup> 4,795,843	01-03-1989	Imai et al.	
	22	<sup>US-</sup> 5,001,293	03-19-1991	Nubel et al.	
	23	<sup>US-</sup> 5,243,098	09-07-1993	Miller et al.	
	24	<sup>US-</sup> 5,276,240	01-04-1994	Timmons et al.	
	25	US- 5,334,777	08-02-1994	Miller et al.	
	26	<sup>US-</sup> 5,969,195	10-19-1999	Stabel et al.	
	27	<sup>US-</sup> 5,998,679	12-07-1999	Miller	
	28	<sup>US-</sup> 6,403,840	06-11-2002	Zhou et al.	
	29	<sup>US-</sup> 6,462,243	10-08-2002	Zhou et al.	
	30	<sup>US-</sup> 6,465,696	10-15-2002	Zhou et al.	
	31	<sup>US-</sup> 6,472,572	10-29-2002	Zhou et al.	
	32	<sup>US-</sup> 6,486,368	11-26-2002	Zhou et al.	
	33	<sup>US-</sup> 6,525,250	02-25-2003	Grosso	
	34	<sup>US-</sup> 6,465,699	10-15-2002	Grosso	
	35	us- 20030120121A1	06-26-2003	Sherman et al.	
	36	<sup>US-</sup> 20030125589A1	07-03-2003	Grosso	
	37	<sup>US-</sup> 20030166973A1	09-04-2003	Zhou et al.	
		US-			

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	T
		Country Code <sup>3</sup> "Number * "Kind Code <sup>8</sup> (# known)			Or Relevant Figures Appear	T*
TN	38	GB 474922 A	11-15-1937	Groves	·	
<b>上り</b> ′	39	GB 883256 A	11-29-1961	Eisenlohr		
TW	40	GB 2120249 A	11-30-1983	Johannes et al.		
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Examiner	Date	
Signature	Considered	9/16/05
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5053012			Application Number	10/826,885		
INF	ORMATION	DIS	CLOSURE	Filing Date	04/16/2004	
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	WAYCUILIS, John J.	
	///			Art Unit	1764	·
(Use as many sheets as necessary)			iacessary)	Examiner Name	unknown	
Sheet	3	of	3	Attorney Docket Number	200306 USA	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
TN	41	JLM TECHNOLOGY LTD.; "The Miller GLS Technology for Conversion of Light Hydrocarbons to Alcohols"; New Science for the Benefit of Humanity; 05/31/00; pp. 1-10.	
TN	42	JAUMAIN, Denis and SU, Bao-Lian; "Direct Catalytic Conversion of Chloromethane to Higher Hydrocarbons"; 2000; pp. 1607- 1612; Studies in Surface Science and Catalysis 130.	
40	43	TAYLOR, Charles E.; "Conversion of Substituted Methanes Over ZSM-Catalysts"; 2000; pp. 3633-3638; Studies in Surface Science and Catalysis 130; Elsevier Science B.V.	
TW	44	ZSM-5 Catalyst; http://chemelab.ucsd.edu/methanol/memos/ZSM-5.html; 11/06/2003; p. 1.	
72	45	FINAL REPORT; "Abstract"; http://chemelab.ucsd.edu/methanol/memos/final.html; 5/09/2004; pp. 1-7.	
72	46	DRISCOLL, Daniel J.; "Direct Methane Conversion"; Federal Energy Technology Center, U.S. Dept. of Energy; M970779; pp. 1-10.	
FN	47	OLAH ET AL.; "Selective Monohalogenation of Methane Over Supported"; J. American Chemical Society 1985, Vol.107; 0002-7863/85/1507-7097\$01.50/0; pp. 7097-7105.	
72		MURRAY ET AL.; "Conversion of Methyl Halides to Hydrocarbons on Basic Zeolites: A Discovery by in Situ NMR"; J. Am. Chem. Soc. 1993, Vol. 115; pp. 4732-4741.	

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Signature Considered 9	118142

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INF	ORMATION	DIS	CLOSURE	Filing Date	04/16/2004	_
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	WAYCUILIS, John J.	
ĺ				Art Unit	1764	
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Sheet	1	of	1	Attorney Docket Number	200306 USA	

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not classion is in conformance with MPEP 609. Oraw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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